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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,150	12/31/2003	Srinivas Chervirala	246435US67	6860

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ALEXANDRIA, VA 22314

EXAMINER
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NGUYEN, QUYNH H

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/748,150

Applicant(s)

CHERVIRALA ET AL.

Examiner

Quynh H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9, 11-16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutzmann et al. (U.S. Patent 6,118,861) in view of Dubner et al. (U.S. Patent 4,425,479).

**As to claim 1**, Gutzmann et al. teach a call control system (Fig. 5, 80) for monitoring a status of a call between a caller and a called party (col. 3, lines 12-15), comprising:

a hold detection component for detecting that the call between a caller and the called party has been placed on hold (col. 3, lines 16-17 and col. 4, lines 15-35 - *where Gutzmann discussed calling party 10 places a call to called party 11 and placed on hold or called party or agent 12 in ACD system 17 placed calling party on hold, CCR 18 is activated to provide music on hold to the calling party, hence there exist a hold detection component in order to detect the calling party is placed on hold by the called party*);

a detection component (Fig. 5, *DTMF detector 84*) for detecting that the call between the caller and the called party is no longer on hold (col. 7, lines 28-30 - *where Gutzmann discussed DTMF detecting that the hold has been removed*);

a notification component (Fig. 5, alerting circuit 86) for sending a notification that the call is no longer on hold to the one of the caller and the called party that did not initiate putting the call between the caller and the called party on hold (col. 7, lines 33-37 and col. 4, lines 39-45 - *where Gutzmann discussed the invention described functions identically regardless of the caller or called parties places the other party on hold, assumed that the caller or subscriber is placed on hold by the called party, hence sending a notification that the call is no longer on hold to the caller party that did not initiate putting the call on hold*).

Gutzmann does not explicitly teach a call control component for re-establishing the call between the caller and the called party in response to the notification sent out by the notification component.

Dubner et al. teach re-establishing the call between the caller and the called party in response to the notification sent out by the notification component (col. 4, lines 23-33 - *where Dubner discussed resume the telephone conversation in response to the notification that the called party has returned to the line*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the step of re-establishing the call between the caller and the called party in response to the notification sent out by the notification component, as taught by Dubner, in Gutzmann's system thus making the system more

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efficient by giving the calling party an opportunity to return to the line in response to the notification that the called party has returned to the line and ready to resume the conversation, as discussed by Dubner (col. 4, lines 30-43).

**As to claim 2**, Gutzmann et al. do not teach the detection component comprises a voice detection component.

Dubner et al. teach the voice detection component (Fig. 1, *voice detection circuit 12*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the voice detection component, as taught by Dubner, in Gutzmann's system thus making the detection component more efficient and flexible by detecting both DTMF tone and voice communication from the called party when he or she returns to the line and speaks into it, as discussed by Dubner (col. 4, lines 23-25).

**As to claim 3**, Gutzmann et al. teach the detection component comprises a DTMF detection component (Fig. 5, *DTMF detector 84*).

**As to claim 4**, Gutzmann et al. teach the notification component comprises in-band notification component (col. 7, lines 33-37 - where Gutzmann discussed alerting circuit 86 sending a tone to the subscriber's telephone; and also claim 5 that depends on claim 4 recited "the in-band notification comprises a bridge for sending a tone to the one of the caller and the called party that did not initiate putting the call between the caller and the called party on hold", hence the notification component comprises in-band notification).

**As to claim 5**, Gutzmann et al. teach the notification component comprises out-of-band notification component (Fig. 4 and col. 7, lines 3-12 - *where Gutzmann discussed central office communicates with mobile switching office to send notification to wireless terminal, hence the notification component comprises out-of-band notification*).

**As to claim 6**, Gutzmann et al. teach the in-band notification comprises a bridge (*alerting circuit*) for sending a tone to the one of the caller and called party that did not initiate putting the call between the caller and the called party on hold (col. 7, lines 33-37).

**As to claim 9**, Gutzmann teaches the out-of-band notification component comprises a line card notification component (col. 5, lines 53-67 - *where Gutzman discussed the Analog Display Subscriber Interface ADSI displays status information and instructions to the called party on how to alert the calling party when the hold is release; and Applicant's specification page 7, lines 4-5 also support Examiner's assertions by stating that line card notification for display devices, hence Gutzmann teaches line card notification component for ADSI display device*).

**As to claim 11**, Gutzmann et al. teach a call control method for monitoring a status of a call between a caller and a called party (col. 3, lines 12-15), comprising:

detecting that the call between a caller and the called party has been placed on hold (col. 3, lines 16-17);

detecting that the call between the caller and the called party is no longer on hold (col. 5, lines 60-61 - *where Gutzmann discussed alerting the calling party when the hold*

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*is released and col. 7, lines 35-37 - where Gutzmann discussed alerting signal or tone indicating of the release of the held call by the called party);*

sending a notification that the call is no longer on hold to the one of the caller and the called party that did not initiate putting the call between the caller and the called party on hold (col. 7, lines 33-37 and col. 4, lines 39-45 - *where Gutzmann discussed the invention described functions identically regardless of the caller or called parties places the other party on hold, assumed that the caller / subscriber is placed on hold by the called party, hence sending a notification that the call is no longer on hold to the caller that did not initiate putting the call on hold*).

Gutzmann does not explicitly teach re-establishing the call between the caller and the called party in response to the notification sent out by the notification component.

Dubner et al. teach re-establishing the call between the caller and the called party in response to the notification sent out by the notification component (col. 4, lines 23-33 - *where Dubner discussed resume the telephone conversation in response to the notification that the called party has returned to the line*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the step of re-establishing the call between the caller and the called party in response to the notification sent out by the notification component, as taught by Dubner, in Gutzmann's system thus making the system more efficient by giving the calling party an opportunity to return to the line in response to the

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notification that the called party has returned to the line and ready to resume the conversation, as discussed by Dubner (col. 4, lines 30-43).

**As to claim 12**, Gutzmann et al. do not teach detecting that the call is no longer on hold comprises performing voice detection.

Dubner et al. teach detecting that the call is no longer on hold comprises performing voice detection (col. 4, lines 23-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of detecting that the call is no longer on hold comprises performing voice detection, as taught by Dubner, in Gutzmann's system thus making the detection component more efficient and flexible by detecting both DTMF tone and voice communication from the called party when he or she returns to the line and speaks into it, as discussed by Dubner (col. 4, lines 23-25).

**As to claim 13**, Gutzmann et al. teach detecting that the call is no longer on hold comprises performing DTMF detection (col. 7, lines 28-30).

**As to claim 14**, Gutzmann et al. teach the step of sending comprises an in-band notification (col. 7, lines 33-37 - *where Gutzmann discussed alerting circuit 86 sending a tone to the subscriber's telephone, and also claim 5 that depends on claim 4 recited "the in-band notification comprises a bridge for sending a tone to the one of the caller and the called party that did not initiate putting the call between the caller and the called party on hold", hence in-band notification*).

**As to claim 15**, Gutzmann et al. teach the step of sending comprises an in-band notification (Fig. 4 and col. 7, lines 3-12 - *where Gutzmann discussed central office*



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*communicates with mobile switching office to send notification to wireless terminal, hence out-of-band notification).*

**As to claim 16**, Gutzmann et al. teach the in-band notification comprises utilizing a bridge (*alerting circuit*) for sending a tone to the one of the caller and called party that did not initiate putting the call between the caller and the called party on hold (col. 7, lines 33-37).

**As to claim 19**, Gutzmann teaches the out-of-band notification comprises a line card notification (col. 5, lines 53-67 - *where Gutzman discussed the Analog Display Subscriber Interface ADSI displays status information and instructions to the called party on how to alert the calling party when the hold is released, and Applicant's specification page 7, lines 4-5 also support Examiner's assertion by stating that line card notification for display devices, hence Gutzmann teaches line card notification component for ADSI display device*).

3. Claims 7 and 17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutzmann et al. (U.S. Patent 6,118,861) in view of Dubner et al. (U.S. Patent 4,425,479) and further in view of Litwin, JR. (Pub.No: US 2004/0136515).

**As to claim 7**, Gutzmann and Dubner do not teach the out-of-band notification component comprises a push-to-alert notification component.

Litwin teaches a push-to-alert notification component (page 3, [0031], line 6 and [0032] - *where Litwin discussed when the OFF-HOLD- DETECT is depressed or pushed, the telecommunications device detecting a change from on hold to off hold, and*

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*providing alert that the on hold party is no longer on hold, hence push to cause alert notification).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of the out-of-band notification component comprises a push-to-alert notification component, as taught by Litwin, in Gutzmann and Dubner's systems thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as push to alert that the called party has returned, and freeing the on hold party to perform useful work such as answering another call, rather than having to monitor the line until receiving the notification that the called party has returned.

**As to claim 17**, Gutzmann and Dubner do not teach the out-of-band notification component comprises a push-to-alert notification.

Litwin teaches a push-to-alert notification (page 3, [0031], line 6 and [0032] - *where Litwin discussed when the OFF-HOLD- DETECT is depressed or pushed, the telecommunications device detecting a change from on hold to off hold, and providing alert that the on hold party is no longer on hold, hence push to cause alert notification).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the feature of the out-of-band notification comprises a push-to-alert notification, as taught by Litwin, in Gutzmann and Dubner's systems thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as push to alert notification that the called party has returned, and freeing the on hold party to perform useful work such as answering

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another call, rather than having to monitor the line until receiving the notification that the called party has returned.

4. Claims 8, 10, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gutzmann et al. (U.S. Patent 6,118,861) in view of Dubner et al. (U.S. Patent 4,425,479) and further in view of Brachman et al. (U.S. Patent 6,374,102).

**As to claim 8**, Gutzmann and Dubner do not teach the out-of-band notification component comprises an instant messaging component.

Brachman et al. teach the out-of-band notification component comprises an instant messaging component (col. 42, lines 24-28 - *where Brachman discussed the VAP 103 sends notification to MS 101 user via the NSP 106 that the call is no longer on hold and col. 34, lines 54-59 - where Brachman discussed MS 101 user notification using SMS signaling with text messages, hence the out of band notification comprises the instant message*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of instant messaging for notifying the calling party that the called party has returned, as taught by Brachman, in Gutzmann and Dubner's systems, thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as instant messaging that the called party has returned, and freeing the on hold party to perform useful work such as answering another call, rather than having to monitor the line until receiving the instant message notification that the called party has returned.

**As to claim 10**, Gutzmann and Dubner do not teach the out-of-band notification component comprises an SMS messaging component.

Brachman et al. teach the out-of-band notification component comprises an SMS messaging component (col. 42, lines 24-28 - *where Brachman discussed the VAP 103 sends notification to MS 101 user via the NSP 106 that the call is no longer on hold and col. 34, lines 54-59 - where Brachman discussed MS 101 user notification using the notification component comprises SMS signaling with text messages, hence the out of band notification comprises the SMS message*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of SMS messaging for notifying the calling party that the called party has returned, as taught by Brachman, in Gutzmann and Dubner's systems, thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as SMS messaging that the called party has returned, and freeing the on hold party to perform useful work such as answering another call, rather than having to monitor the line until receiving the instant message notification that the called party has returned.

**As to claim 18**, Gutzmann and Dubner do not teach the out-of-band notification comprises an instant messaging.

Brachman et al. teach the out-of-band notification comprises an instant messaging (col. 42, lines 24-28 - *where Brachman discussed the VAP 103 sends notification to MS 101 user via the NSP 106 that the call is no longer on hold and col. 34, lines 54-59 - where Brachman discussed MS 101 user notification using SMS*

*signaling with text messages, hence the out of band notification comprises the instant message).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of instant messaging for notifying the calling party that the called party has returned, as taught by Brachman, in Gutzmann and Dubner's systems, thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as instant messaging that the called party has returned, and freeing the on hold party to perform useful work such as answering another call, rather than having to monitor the line until receiving the instant message notification that the called party has returned.

**As to claim 20**, Gutzmann and Dubner do not teach the out-of-band notification comprises an SMS messaging.

Brachman et al. teach the out-of-band notification comprises an SMS messaging (col. 42, lines 24-28 - *where Brachman discussed the VAP 103 sends notification to MS 101 user via the NSP 106 that the call is no longer on hold and col. 34, lines 54-59 - where Brachman discussed MS 101 user notification using SMS signaling with text messages, hence the out of band notification comprises the SMS message).*

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of SMS messaging for notifying the calling party that the called party has returned, as taught by Brachman, in Gutzmann and Dubner's systems, thus making the system more efficient by allowing the calling party to be notified using a variety of notification methods such as SMS messaging that the

called party has returned, and freeing the on hold party to perform useful work such as answering another call, rather than having to monitor the line until receiving the instant message notification that the called party has returned.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grossman (U.S. Patent 6,122,346) teaches telephone on-hold response system.

Furman et al. (U.S. Patent 6,031,905) teach network-based call hold stand by.

Barry, III et al. (U.S. Patent 4,731,822) teach held party notification feature.

Caffine (U.S. Patent 3,961,142) teach method and apparatus for automatically annunciating the completion of a telephone call hold interval.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 571-272-7489. The examiner can normally be reached on Monday - Thursday from 6:15 A.M. to 4:45 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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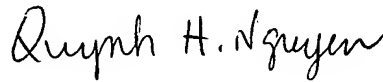
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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, reading "Quynh H. Nguyen".

**Quynh H. Nguyen**  
**Patent Examiner**  
**Art Unit 2642**